lavatory is to be used by children of school age. The presence of an attendant in the school lavatories, especially during recess, would aid materially in the discovery of girls having a discharge, in the proper use of the paper covers, and in the general cleanliness of the lavatory.

Gonorrhea in adults is so intimately connected with the public morals that any marked diminution in its prevalence seems like trying to reform the universe. Gonorrhea in little girls, on the other hand, is simply the result of inadequate sanitary precautions. The fact that hundreds of little girls are innocently infected with it every year in our large cities is a disgrace to the hygienic methods of the beginning of the twentieth century. Certainly we can say of gonorrheal vaginitis in children that one ounce of prevention is worth many pounds of cure.

DIRECT EXAMINATION OF THE DUODENAL CONTENTS (ALSO BILE) AS AN AID IN THE DIAGNOSIS OF GALL-BLADDER AND PANCREATIC AFFECTIONS.[1]

By Max Einhorn, M.D.,

PROFESSOR OF INTERNAL MEDICINE AT THE NEW YORK POST-GRADUATE MEDICAL SCHOOL.

The diagnosis of gall-bladder lesions is based upon the physical findings of the upper right abdomen in conjunction with the subjective symptoms and the objective data obtained. In typical cases of gall-stone disease there is no difficulty in recognizing the affection.

The characteristic symptoms are as follows: severe attacks of sudden pain in the upper abdomen appear at comparatively long intervals or years; they radiate to the back, often to the right shoulder-blade; are intense; last a few hours, or at the utmost two to three days, and leave as suddenly as they come. Frequently hypodermic injections of morphin have to be resorted to. During the attack the liver is usually increased in size; sometimes a more or less icteric discoloration of the eyes or skin is encountered; at times pronounced jaundice exists. A slight rise of temperature is often present in some of the attacks. During the interval there is perfect euphoria.

Frequently, however, the typical picture is lacking, and here we are at a loss to determine the trouble.

Still greater difficulties are encountered in the diagnosis of pancreatic lesions. A study of the function of this important organ has been frequently undertaken in an indirect way either by examining the feces for the trypsin ferment or the gastric contents with its returned duodenal juices after the ingestion of olive oil into the stomach (Boldyreff's method). In neither of these methods the pancreatic juice can be obtained in a pure state, and therefore cannot be studied in a comprehensive manner.

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[1] Read before the American Gastro-enterological Association, at Atlantic City, N. J., June 22, 1914.

During the last four to five years I have frequently attempted to obtain the duodenal contents in a direct way in appropriate cases. Some of the results were published in 1910.[2] In the present article I shall describe some of my new experiences relating to gall-bladder and pancreatic affections. We intentionally selected merely those cases in whom the diagnosis had been confirmed by operation or in whom the further course of the disease corroborated the clinical diagnosis. For convenience we give a summary of these cases in table form:

In looking over the table the following items are worthy of consideration: Two cases of catarrhal jaundice showed the presence of mucus in the duodenal contents; the bile appeared scantily, was clear, and revealed an admixture of mucus at intervals. In 15 cases of cholecystitis with gall-stones the bile was turbid in 13; in 2, however, it was clear. In 5 cases with turbid bile the gall-stones were found at the operation. Of the 2 cases with clear bile in 1 two small stones were passed a few days later and discovered in the stool. In one case with echinococcus of the liver the bile was dark green, turbid, with some blood admixed.

Among 6 cases with pancreatic lesions the pancreatic secretion in 4 of the cases showed absence of one or two ferments, while in two with pancreatic tumors, verified by operation, the pancreatic secretion a few days prior to the operation revealed the presence of all three enzymes. Sugar was found in the urine in 2 of these cases.

In trying to utilize the experiences gained from the above table the following deductions appear justified:

1. The macroscopic appearance of the bile is of great diagnostic import. If it is golden yellow and clear it usually indicates a normal gall-bladder. When the fresh bile looks greenish yellow and is somewhat turbid it portends a diseased state of the gall-bladder, which frequently contains gall-stones. Golden-yellow bile containing mucus is frequently observed in catarrhal jaundice. A pure golden-yellow bile may, however, occasionally exist notwithstanding the presence of gall-stones (Case M.).
2. Duodenal contents containing bile and pancreatic secretions permit gauging the pancreatic function.
3. The presence of the three ferments in sufficient quantity speaks for a normal activity. If one of the ferments is constantly absent

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[2] Max Einhorn, Experiences with the duodenal Contents, Jour. Amer. Med. Assoc., July 2, 1910.

CASES OF GALL-BLADDER AND PANCREATIC AFFECTIONS IN WHOM THE DUODENAL CONTENTS WERE DIRECTLY EXAMINED (1911 TO MAY, 1914).

No.	Name.	Diagnosis.	Stomach contents.	Date.	Examination of duodenal contents.			Appearance of duodenal contents.	Microscopic examination of duodenal contents.	Remarks.
					Amylopsin mm.	Steapsin mm.	Trypsinogen mm.			
1	M.	Icterus, catarrhal.		April 13, 1912	+	0	2	Yellow, mixed with mucus.		
				" 20, 1912	+	10	0			
				" 28, 1912	2	4	3			
2	K.	Icterus, catarrhal.	HCl + Ac. = 46	Feb. 14, 1914	2	8	8	Yellow, turbid; bile appears only some time after respiration; occasional blood specks; mucus.	Red-blood cells; mucus, blood pigment; crystals, bacillus pyocyaneus; bacillus coli communis.	
3	T.	Cholelithiasis; ulcus duodeni.	HCl + Ac. = 70	Feb. 25, 1913	4	0	0	Greenish-yellow, alkaline.		
				April 4, 1913	3	1	3			
4	L.	Cholelithiasis; ulcus ventriculi; appencitis.	HCl + Ac. = 80	April 20, 1913	3	5	1.5	Golden-yellow, clear.		
5	F.	Cholecystitis; atonia ventriculi.	HCl + Ac. = 30	Jan. 22, 1912	0	0	2	Yellow, turbid; alkaline.		
				" 23, 1912	10	0	2			
				Feb. 2, 1912	Trace.	+	30			
				" 17, 1912	3	0	0			
				" 21, 1912	12	+	+			
				Mar. 12, 1912	+	0	3			
6	E.	Cholecystitis; icterus.	....	Feb. 10, 1912	+	+	+			
7	Mrs. F.	Cholecystitis; cholelithiasis	HCl + Ac. = 76	Dec. 6, 1912	2	1	0	Yellowish-green, turbid; yellow.		
				" 8, 1912	4	5	2			
				" 17, 1912	3	2	2			
8	D.	Cholecystitis; cholelithiasis; atonia ventriculi.	HCl + Ac. = 60	April 11, 1913	4	4	2	Somewhat turbid	Mycelia.	Operated.
9	Mrs. E.	Cholecystitis.	HCl + Ac. = 76	Sept. 6, 1912	12	0	2	Turbid, mucus; alkaline = 20; sp. gr. =1008	Leucin; cholesterin crystals.	
10	Mrs. P.	Enteroptosis; cholecystitis.	HCl 0 Ac. = 26	April 4, 1914	5	3	4	Thick, turbid, dark yellow-green; yellow, turbid.	Bacilli.	
				" 7, 1914	6	1	1			

11	Mrs. R.	Cholecystitis.	HCl + Ac. = 60	Jan. 17, 1914	+	2	0.5	Yellowish green, turbid; alkaline.		
12	Miss G.	Dilatatio ventriculi; cholecystitis.	HCl + Ac. = 70	Mar. 30, 1914 " 31, 1914	20 12	1.5 15	3 10	Whitish gray, turbid; golden yellow, turbid.		
13	Miss S.	Cholelithiasis; ulcus duodeni	HCl + Ac. = 80	April 3, 1914 " 4, 1914	11 15	2 10	15 20	Turbid, greenish; turbid, yellow-green; blood present.	Boas-Oppler bacilli.	Operated.
14	Mrs. M.	Ulcus ventriculi; inanition; cholelithiasis.	....	April 12, 1913	10	2	3	Golden yellow, clear; alkaline.		
15	Mrs. P.	Echinococcus of liver.	....	Mar. 11, 1913	8	Trace.	5	Dark green, turbid; neutral; blood present.	Red-blood cells; bacteria.	Operated.
16	Mrs. W.	Cholecystitis; enlargement of liver.	HCl 0 Ac. = 25	Nov. 29, 1911	Present.	0	Present.	Dark green; alkalinity equals 25.		
17	J. B. D.	Cholelithiasis.	HCl + Ac. = 65	Mar. 15, 1911	Present.	Present.	Present.	Yellow, turbid; alkaline.	....	Operated.
18	Mrs. B.	Cholelithiasis; icterus.	HCl +	Feb. 17, 1914	......	....	....	Turbid, bloody; no bile; alkaline	....	Operated.
19	Mrs. J.	Cholecystitis; pancreatitis chronica.	HCl 0 Ac. = 20	Oct. 10, 1912	Present.	Trace.	Absent.	Alkaline.	....	Operated.
20	Dr. S.	Achylia gastrica; cholelithiasis; icterus; pancreatitis.	HCl 0 Reaction faintly acid.	Mar. 30, 1913	6	0.5	0	Faintly yellow; alkaline, turbid.	Streptococci.	Operated.
21	M. S.	Tumor of liver; pancreatitis, chronic or neoplasm; icterus.	HCl + Ac. = 40	Feb. 13, 1914	4	2	1	Turbid, white; no bile; alkaline.	Long chain; non-hemolytic streptococcus; bacillus coli communis.	Operated; urine contained bile and 2 per cent. sugar.
22	M. P. D.	Ulcer of stomach; cirrhosis of liver; pancreatitis.	HCl + Ac. = 48	Jan. 13, 1913	0	12	2	Yellow, somewhat turbid.	....	Urine contained 1 per cent. sugar.
23	Mrs. S.	Achylia gastrica; pancreatitis, chronic.	HCl 0 Ac. = 4	Nov. 9, 1913	2	2	0	Golden yellow; bloody.		
24	W. Z.	Pancreatic tumor.	HCl + Ac. = 80	Mar. 12, 1913	Present.	Present.	Present.	Yellow, slightly turbid.	....	Operated.

it usually indicates chronic pancreatitis. A tumor of the pancreas may, however, exist notwithstanding the presence of all the three ferments (Cases M. S. and W. Z.). This apparently surprising fact finds its explanation in the circumstance that the tumor has yet left enough healthy tissue in the rest of the pancreas to continue its function in an undisturbed manner. Similar conditions are occasionally encountered in other organs affected by growths (stomach, kidney, etc.).

4. Duodenal contents persistently revealing neither bile nor evidences of pancreatic secretion speak for a mechanical obstacle just above Vater's papilla (usually stone), as shown by Case B.

The clinical value of the direct examination of the duodenal contents in gall-bladder and pancreatic affections is therefore apparent. It will not be amiss to add a few lines with regard to the procedure.

PREPARATION OF THE PATIENT. The best way to obtain the duodenal contents for examination of bile is either to have the patient in the fasting condition, having inserted the tube before retiring, or else about a half-hour after the ingestion of a cup of tea with sugar or clear bouillon, the patient having taken the duodenal tube early in the morning a few hours previous to the examination.

For the examination of the pancreatic juice the same method of preparation of the patient may be applied, or any liquid diet (milk, bouillon, raw eggs), about 200 c.c., administered one to two hours previously.

METHOD OF OBTAINING THE DUODENAL CONTENTS. This is usually done by aspiration. It should be performed carefully, aspirating slowly with the syringe every minute or so, with frequent intermissions.

In case the aspiration has been performed five to ten minutes and nothing has yet appeared, two means may be employed to attain the desired end: One is by the injection of secretin subcutaneously and aspirating three to five minutes later; the other consists in employing duodenal lavage. The latter is performed in the following manner: The piston of the syringe is slowly withdrawn, the empty barrel is then filled with water (blood temperature) and raised. The latter usually begins to flow into the duodenum; if it does not, slight pressure may be exerted by pushing the piston into the barrel for a half to three-quarters of a minute in order to start the flow. The piston is again withdrawn, the flow, however, continues. Before the barrel is completely empty it is quickly lowered in order to make some of the fluid return. If this fails the procedure is repeated. Admixed with the outflowing water there is usually bile present which can serve for the examination.

ABSENCE OF BILE. In our previous paper[3] we had the following paragraph regarding this point: "Occasionally we obtain on aspiration of the duodenal contents at first only a clear or slightly amber-colored fluid. It is of alkaline reaction and contains the pancreatic ferments. Usually after waiting a short time, and after repeated aspirations, a golden-yellow fluid (containing bile) appears. This has no diagnostic significance. If, however, after patient waiting and aspirating only pancreatic juice but no trace of bile appears it may be of some importance, particularly in cases of chronic jaundice. If bile is present in the duodenal contents a complete occlusion of the common bile-duct can be excluded. If the bile is entirely missing and pancreatic juice is present it points to the seat of the obstruction above the common duct."

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[3] Loc. cit.

I would like to add that absence of both bile and pancreatic juice, as already stated above, speaks for a mechanical obstruction of the common duct just above Vater's papilla, thus blocking the entrance into the duodenum of either bile or pancreatic juice (Case B.). In these instances it is advisable to ascertain positively the position of the capsule end of the tube in the duodenum by the milk test or Rœntgen rays, as there is otherwise very little to go by. In one case of probable neoplasm of the pancreas with secondary involvement of the liver, not mentioned in the table, there could be found no bile in the duodenal contents after systematic aspiration, while the duodenal bucket left in the digestive tract overnight returned filled with bile, the thread likewise showing bile for several inches near the bucket. There was no jaundice present. It is difficult to explain this occurrence. Possibly the tumor in the standing or sitting postures of the patient interfered with the outflow of bile while the obstacle did not exist in the recumbent position.

DISSEMINATED SCLEROSIS.

ITS FREQUENCY COMPARED WITH OTHER ORGANIC DISEASES; ITS ETIOLOGY AND PATHOGENESIS; THE TYPES AND DIFFERENTIAL DIAGNOSIS OF THE DISEASE; ITS COURSE AND TREATMENT. A CLINICAL STUDY OF NINETY-ONE CASES.

By Joseph Collins, M.D.,
PHYSICIAN TO THE NEUROLOGICAL INSTITUTE OF NEW YORK,
AND
Edmund Baehr, M.D.,
JUNIOR NEUROLOGIST TO THE CINCINNATI GENERAL HOSPITAL, CINCINNATI, OHIO.

(From the Neurological Institute of New York, First Division.)

Disseminated sclerosis, or insular sclerosis, is a disorder which is still rarely diagnosed in this country. Nevertheless, omitting the syphilitic and parasyphilitic processes, it is the most common organic nervous disease. Byron Bramwell made the diagnosis